

# THE ABSTRACT

--A filtering face mask that has a mask body and an exhalation valve. The mask body is adapted to fit over the nose and mouth of a wearer. The exhalation valve is positioned on the mask body substantially opposite to a wearer's mouth. The exhalation valve comprises a valve seat that has a seal surface, an orifice that is circumscribed by the seal surface, and cross members that extend across the orifice to create a plurality of openings within the orifice. The valve also includes a single flexible flap that has a fixed portion and a free portion and first and second opposing ends. The first end of the single flexible flap is associated with the fixed portion of the flap so as to remain at rest during an exhalation, and the second end being associated with the free portion of the flexible flap so as to be lifted away from the seal surface during an exhalation. The second end also is located below the first end when the filtering face mask is worn on a person. The flexible flap would normally assume a flat configuration when no forces are applied to it, but the flexible flap has a curved profile when viewed from a side elevation and is pressed towards the seal surface in an abutting relationship therewith when a fluid is not passing through the orifice.--